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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/517,873	12/13/2004	David Stock	PPD 70067	1342
26748	7590	07/20/2007		
SYNGENTA CROP PROTECTION, INC. PATENT AND TRADEMARK DEPARTMENT 410 SWING ROAD GREENSBORO, NC 27409			EXAMINER ARNOLD, ERNST V	
			ART UNIT 1616	PAPER NUMBER
			MAIL DATE 07/20/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/517,873

Applicant(s)

STOCK ET AL.

Examiner

Ernst V. Arnold

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 June 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6-10 is/are pending in the application.
- 4a) Of the above claim(s) 11 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

Claims 1-5 have been cancelled. Claim 11 has been withdrawn. Claims 6-10 are under examination. Applicant's amendment necessitated a new ground of rejection. This Action is FINAL.

**Comment:** On page 10, line 5 of Example 1, there are several question marks. The Examiner requests clarification.

#### **Withdrawn rejections:**

Claim 7 was rejected under 35 U.S.C. 112, second paragraph. Applicant has amended the claim to overcome this rejection and the Examiner withdraws the rejection.

Claim 6 was rejected under 35 U.S.C. 102(a) and 35 U.S.C. 102(e) as being anticipated by Pallett et al. (WO 02/21919). Applicant has amended the claim and the Examiner withdraws the rejection.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6-10 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has amended the claims to read "an organic phosphate, phosphonate or phosphinate adjuvant at a concentration of less than 0.5% v/v." thus changing the scope of the claim. Clearly not all organic

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phosphates, phosphonates or phosphinates are liquids. Applicant discloses that compounds of formula II will generally be an oil (or soluble in an organic solvent) (Page 8, lines 12-13). The v/v is now unclear to the Examiner with respect to those organic phosphates, phosphonates or phosphinates that are solids because the solid adjuvant is dissolved in the solution and thus occupies the "same volume" as the solvent from a macroscopic perspective. The claims will be examined as they read on less than 0.5% w/v.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pallett et al. (WO 02/21919).

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Applicant claims a herbicidal composition comprising mesotrione and an organic phosphate, phosphonate or phosphinate adjuvant at a concentration of less than 0.5% v/v.

### **Determination of the scope and content of the prior art**

#### **(MPEP 2141.01)**

Pallett et al. teach herbicidal compositions with the instantly elected cyclohexanedione, mesotrione (Abstract). Pallett et al. teach a suspension *concentrate* comprising 50% w/v mesotrione and urea herbicide and 0.5 % w/v ethoxylated tristyril phenol phosphate (Page 8, example C1). Pallett et al. clearly teach that concentrates must be diluted before use (page 6, middle of page).

### **Ascertainment of the difference between the prior art and the claims**

#### **(MPEP 2141.02)**

1. While Applicant claims a herbicidal composition comprising mesotrione and an organic phosphate, phosphonate or phosphinate adjuvant at a concentration of less than 0.5% v/v, Pallett et al. do not expressly teach a herbicidal composition with this concentration of organic phosphate, phosphonate or phosphinate adjuvant.

### **Finding of prima facie obviousness**

#### **Rational and Motivation (MPEP 2142-2143)**

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1. It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to prepare the composition of Pallett et al. with an organic phosphate, phosphonate or phosphinate adjuvant at a concentration of less than 0.5% v/v and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Pallett et al. teach dilution of the concentrate, which would bring the concentration to less than 0.5% v/v.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976).

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 6-10 remain/are rejected under 35 U.S.C. 103(a) as being unpatentable over Rusch (WO 93/04585) in view of Wichert et al. (WO 02/19823).

Applicant claims an herbicidal composition comprising mesotrione and organic phosphate, phosphonate or phosphinate adjuvant at a concentration of less than 0.5% v/v.

**Determination of the scope and content of the prior art**

**(MPEP 2141.01)**

Rusch teaches herbicidal compositions which comprise a phosphonate or phosphinate of  $(RO)_xP=O(R')_y$  (where x and y are each 1 or 2 and R and R' may be the same or different and each represent straight or branch-chained alkyl of 1 to 12 carbon

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atoms) used with herbicides (Abstract; page 11 example 3 and claim 1, for example).

Rusch claim the ethylhexyl derivative (Claim 2).

Wichert et al. teach mesotrione formulation (Abstract and claims 1-8). Wichert et al. teach adjuvants including organic phosphates, organic phosphoric acids and phosphoric acid (Page 4, lines 9-16).

**Ascertainment of the difference between the prior art and the claims  
(MPEP 2141.02)**

Rusch et al. do not expressly teach a formulation with mesotrione and an organic phosphate, phosphonate or phosphinate adjuvant.

**Finding of prima facie obviousness**

**Rational and Motivation (MPEP 2142-2143)**

It would have been obvious to one of ordinary skill in the art at the time the claimed invention was made to add mesotrione, as suggested by Wichert et al., to the composition of Rusch and produce the instant invention.

One of ordinary skill in the art would have been motivated to do this because Rusch teaches that the compositions can contain one or more further active ingredients including herbicides (Page 5, second paragraph) and Wichert et al. teaches that mesotrione can be formulated with organic phosphate adjuvants. The selection of a particular organic phosphate, phosphonate or phosphinate is deemed merely a matter of judicious selection and routine optimization by one of ordinary skill in the art.



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A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill in the art might reasonably infer from the teachings. (*In re Opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA) 1976).

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention. Therefore, the invention as a whole was *prima facie* obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

**Response to arguments:**

Applicant asserts that one of ordinary skill in the art would not have had a reasonable expectation that the modification of Rush as suggested by the Examiner (i.e., replacement of the specific sugar beet herbicides of Rush with the mesotrione herbicide of Wichert) would result in a beneficial and synergistic herbicidal composition. The Examiner respectfully disagrees. The Examiner did not say to replace the herbicides of Rush with the mesotrione herbicide of Wichert but rather stated that Rush suggested adding other herbicides to the composition and Wichert teaches mesotrione as a herbicide. It remains obvious to one of ordinary skill in the art to add another

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herbicide, such as mesotrione, to the composition of Rush and have a reasonable expectation of producing an herbicidal mixture.

Applicant's unexpected results are not commensurate in scope with the claimed subject matter. Objective evidence of nonobviousness, if any, must be commensurate in scope with that of the claimed subject matter. *In re Kulling*, 14 USPQ2d 1056 (Fed. Cir. 1990); *In re Lindner*, 173 USPQ 356 (CCPA 1972).

### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 6-8 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12 and 13 of copending Application No. 11/000,700. Although the conflicting claims are not identical, they are

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not patentably distinct from each other because the copending application claims a composition comprising mesotrione and a phosphate adjuvant. One of ordinary skill in the art would have recognized the obvious variation and overlap in subject matter with the instant application.

Claims 6-10 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-10 of copending Application No. 10/517,872. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application claims a composition comprising a metal chelate of mesotrione and a phosphate adjuvant (Claims 1 and 6). The types of phosphate, phosphonate or phosphinate adjuvants are described in copending claims 7-10. The Examiner notes the same structures for the phosphates in copending claim 7. One of ordinary skill in the art would have recognized the obvious variation and overlap in subject matter with the instant application.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**Response to arguments:**

Applicant traversed the rejections but no arguments were provided. Applicant will consider filing a terminal disclaimer once allowable subject matter has been identified. Until that time, the rejections are maintained.

***Conclusion***

No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

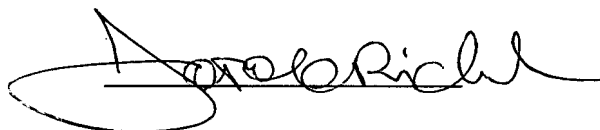
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernst V. Arnold whose telephone number is 571-272-8509. The examiner can normally be reached on M-F (6:15 am-3:45 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ernst Arnold  
Patent Examiner  
Technology Center 1600  
Art Unit 1616

A handwritten signature in black ink, appearing to read "Johann R. Richter", with a large, stylized loop at the beginning.

Johann R. Richter  
Supervisory Patent Examiner  
Technology Center 1600